

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 504320 NJC	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/NZ2004/000165</b>	International filing date (day/month/year) 27 July 2004	Priority date (day/month/year) 30 July 2003
International Patent Classification (IPC) or national classification and IPC <b>Int. Cl. <sup>7</sup> A61M 16/00</b>		
Applicant <b>FISHER &amp; PAYKEL HEALTHCARE LIMITED et al</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
    - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input checked="" type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input checked="" type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand 25 May 2005	Date of completion of the report 4 November 2005
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer  <b>AMOD PRADHAN</b> Telephone No. (02) 6283 2510

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NZ2004/000165

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:

☐ international search (under Rules 12.3 and 23.1 (b))

☐ publication of the international application (under Rule 12.4)

☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:

pages 1 - 12 as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☒ the claims:

pages as originally filed/furnished

pages\* as amended (together with any statement) under Article 19

pages\* 13 - 14 received by this Authority on 25 May 2005 with the letter of 25 May 2005

pages\* received by this Authority on with the letter of

☒ the drawings:

pages 1 - 10 as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. IV Lack of unity of invention**

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
  - ☐ paid additional fees.
  - ☐ paid additional fees under protest.
  - ☐ neither restricted nor paid additional fees.
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
- ☐ complied with.
  - ☒ not complied with for the following reasons:
    1. Claims 1-3 are directed to a forehead rest for a respiratory mask including a deformable resilient member comprising a deformable resilient member having a top surface and a base connected by two side walls, said side walls being substantially thinner in width than said top surface, said walls in use are compressible. It is considered that said side walls being substantially thinner in width than said top surface, said side walls in use are compressible comprises a first "special technical feature".
    2. Claim 4 is directed to a forehead rest for a respiratory mask including a deformable resilient member comprising a hollow conical shape where in use and under compression the top part of said hollow cone deforms or the side walls of said cone deform. It is considered that the hollow conical shape of said deformable resilient member where in use and under compression the top part of said hollow cone deforms or the side walls of said cone deform comprises a second "special technical feature".
    3. Claims 5-8 are directed to a forehead rest for a respiratory mask including a user-adjustable deformable resilient member configured to in use rest against the face of a patient. It is considered that the user-adjustable deformable resilient member comprises a third "special technical feature".
- It is noted that claim 9 is defined by the accompanying figures of the specification and, as such, unity of invention exists between claim 9 and each group of claims for which the figures relate to.
- Since the abovementioned groups of claims do not share any of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept, a priori.
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
  - ☐ the parts relating to claims Nos.

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims 1 – 9	YES
	Claims	NO
Inventive step (IS)	Claims 1 – 9	YES
	Claims	NO
Industrial applicability (IA)	Claims 1 – 9	YES
	Claims	NO

## 2. Citations and explanations (Rule 70.7)

Novelty (N) Claims 1-9

## Claims 1-3

Amended claims 1-3 meet the criteria set forth in PCT Article 33(2) for novelty. The prior art published before the priority date does not disclose a forehead rest including a deformable resilient member, said deformable resilient member having a top surface and a base connected by two side walls, said side walls being substantially thinner in width than said top surface, said side walls in use are compressible.

## Claim 4

Amended claim 4 meets the criteria set forth in PCT Article 33(2) for novelty. The prior art published before the priority date does not disclose a forehead rest including a deformable resilient member being of a hollow conical shape where in use and under compression the top part of said hollow cone deforms or the side walls of said cone deform.

## Claims 5-8

Amended claims 5-8 meet the criteria set forth in PCT Article 33(2) for novelty. The prior art published before the priority date does not disclose a forehead rest including a user-adjustable deformable resilient member.

See however the indication contained in Box VI "Certain documents cited".

It is noted that since claim 9 is defined by the accompanying figures of the specification, claim 9 may be considered as part of each group of claims for which the figures relate to.

Inventive Step (IS) Claims 1-9

## Claims 1-3

Amended claims 1-3 meet the criteria set out in PCT Article 33(3) with regard to the requirement of Inventive Step because the prior art does not obviously suggest to a person skilled in the art a forehead rest including a deformable resilient member, said deformable resilient member having a top surface and a base connected by two side walls, said side walls being substantially thinner in width than said top surface, said walls in use are compressible.

## Claim 4

Amended claim 4 meets the criteria set out in PCT Article 33(3) with regard to the requirement of Inventive Step because the prior art does not obviously suggest to a person skilled in the art a forehead rest including a deformable resilient member being of a hollow conical shape where in use and under compression the top part of said hollow cone deforms or the side walls of said cone deform.

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NZ2004/000165

## Box No. VI Certain documents cited

### 1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date ( valid claim) (day/month/year)
P, X WO 2004/022145	18 March 2004	5 September 2003	6 September 2002

This document explicitly discloses all of the features of claims 5 and 7. See in particular page 20, lines 7-23 and Figs. 63-66.

### 2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure

Date of non-written disclosure  
(day/month/year)

Date of written disclosure  
referring to non-written disclosure  
(day/month/year)

**Box No. VIII**    **Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 7 is not clear because a claim cannot be appended to itself, but appears it should be appended to claim 5 instead.

Claims 6 and 8 are not clear because they are appended to claim 7, but appears they should be appended to claim 5 instead.

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of: V.

Claims 5-8

Amended claims 5-8 meet the criteria set out in PCT Article 33(3) with regard to the requirement of Inventive Step because the prior art does not obviously suggest to a person skilled in the art a forehead rest including a user-adjustable deformable resilient member.

See however the indication contained in Box VI "Certain documents cited".

It is noted that since claim 9 is defined by the accompanying figures of the specification, claim 9 may be considered as part of each group of claims for which the figures relate to.

Industrial Applicability (IA) Claims 1-9

The invention defined in the claims is considered to meet the requirements of Industrial Applicability under Article 33(4) of the PCT because it can be made by, or used in, industry.

P Category Documents

With regard to the document(s) listed in Box VI under "certain documents cited", these are documents published prior to the international filing date but later than the priority date claimed but which would otherwise be considered to be of particular relevance.

Under the PCT, novelty is considered only in respect of documents published before the priority date. The relevance of a document published after the priority date is dependent upon national law. Such documents are excluded from consideration in preliminary examination, under the PCT Guidelines but have been included here for information.

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**WE CLAIM:**

1. A device for delivering a supply of gases to a user comprising:  
a patient interface, in use in fluid communication with said supply of gases,  
a forehead rest engaging said interface including a deformable resilient member configured  
5 to in use rest against the face of a patient,  
said deformable resilient member when compressed in use creating a uniformly and  
gradually increasing force, while evenly distributing the pressure on the forehead of said patient  
that contacts said resilient member,  
said deformable resilient member having a top surface and a base connected by two side  
10 walls, said side walls being substantially thinner in width than said top surface said side walls in  
use are compressible.
2. A device for delivering a supply of gases to a user according to claims 2 or 3 wherein said  
top surface includes additional support at its centre to limit its collapse.
3. A device for delivering a supply of gases to a user according to claims 2 to 4 wherein said  
15 side walls are capable of folding under compression.
4. A device for delivering a supply of gases to a user comprising:  
a patient interface, in use in fluid communication with said supply of gases,  
a forehead rest engaging said interface including a deformable resilient member  
configured to in use rest against the face of a patient, said deformable resilient member being of a  
20 hollow conical shape where in use and under compression the top part of said hollow cone  
deforms or the side walls of said cone deform.
5. A device for delivering a supply of gases to a user comprising:  
a patient interface, in use in fluid communication with said supply of gases,  
a forehead rest engaging said interface including a user-adjustable deformable resilient  
25 member configured to in use rest against the face of a patient.
6. A device for delivering a supply of gases to a user according to claim 7 wherein said  
adjustable deformable resilient member is at least one adjustable strap attached and adjustable on  
said forehead rest.
7. A device for delivering a supply of gases to a user according to claim 7 wherein said  
30 adjustable deformable resilient member is a member rotatably mounted on said forehead rest.
8. A device for delivering a supply of gases to a user according to claim 7 wherein said  
adjustable deformable resilient member is an inflatable member that is inflated with liquid or gas.



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9. A device for delivering a supply of gases to a user as herein described with reference to the accompanying figures.